

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 7/10/2015
Effective: 7/10/2015

Version: DMCEF 2015 R1
Status: Active

Instrument S/N 100694 Analyst Colleen O'Bryen Start Date 12/29/15

1. Diagnostic Test (attached) Internal Standard value $\leq 3.00\%$ Yes
 1. Voltage Checks
 - a. Adjust voltages, if needed
 - i. Lamp (2.6V Maximum)
 - ii. Bias
 - iii. Cooler (2.0V Maximum)
 - iv. Chopper Frequency
 - v. Detector Voltage (-0.100V to 0.100V)
 - b. Set RFI
 - c. Adjust barometer reading to match NIST traceable barometer
 - d. Adjust volume setting, if needed (1.5L +/- 0.1L)
 - e. Print Technician Screen (attached)
 2. Print Calibration Factors (attached)
 3. Volume Test - Minimum 1.5 L (1.3L to 1.7L)
 4. Linearity Test (attached)
 - a. Levels Used
 - i. 0.020g/210L Mnf ILMO Lot 02915020A2 Exp 3/5/17
 - ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
 - iii. 0.080g/210L Mnf ILMO Lot 01315080A3 Exp 2/5/17
 - iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
 - v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17
 1. Simulator S/N DR6267 Date Calibrated 1/20/15
 - vi. 0.300g/210L Mnf Guth Lot 15170 Exp 7/20/17
 1. Simulator S/N DR4162 Date Calibrated 1/19/15
 5. Functional Tests (attached)
 - a. Incomplete
 - b. Invalid
 - c. Interference
 - d. Exceeded attempts
 - i. Acetone - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 1. Simulator S/N DR4163 Date Calibrated 1/19/15
 - ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 1. Simulator S/N 501170 Date Calibrated 1/20/15
 - iii. Negative Control - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 1. Simulator S/N DR4178 Date Calibrated 1/19/15
 - e. RFI
6. Verify stylus is calibrated
 7. Reset Options
 8. Clear Memory
 9. Verification of Calibration
 10. Non-Drinking Subject Test (attached)
 11. Upload
 13. Remove tank prior to shut down

End Date 12/30/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/29/2015
Time: 09:30:51

VERSIONS

DMT: 3.01
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.58 V PASSED
(0.95 V - 2.21 V)
Cooler Voltage = 1.53 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 80 V PASSED
(49 V - 113 V)
Chopper Freq = 540 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.893 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 V <= 0.010 V)
PUMP OFF PASSED
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.096 (0.09%) (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100694

Date: 12/29/2015
Time: 9:38 AM

Temperatures (°C)

Sample Cell: 49.4°C
Breath Tube: 46.3°C

Current Barometer 29.5 in
Volume (Ltr) 1.48

Settings

Lamp: 1.58 V
Bias: 80 V
Cooler: 1.53 V
Chopper: 540 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.023 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 11/03/2011
Time: 07:11:34

Ca = 0.1000
CAL = 1.014984 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0046 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0964 0.0500 <= Xq < 0.2000
a21 = 1.210442 1.050 <= a21 < 1.300
a31 = 0.430416 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

Date: 12/29/2015
 Time: 13:23:28

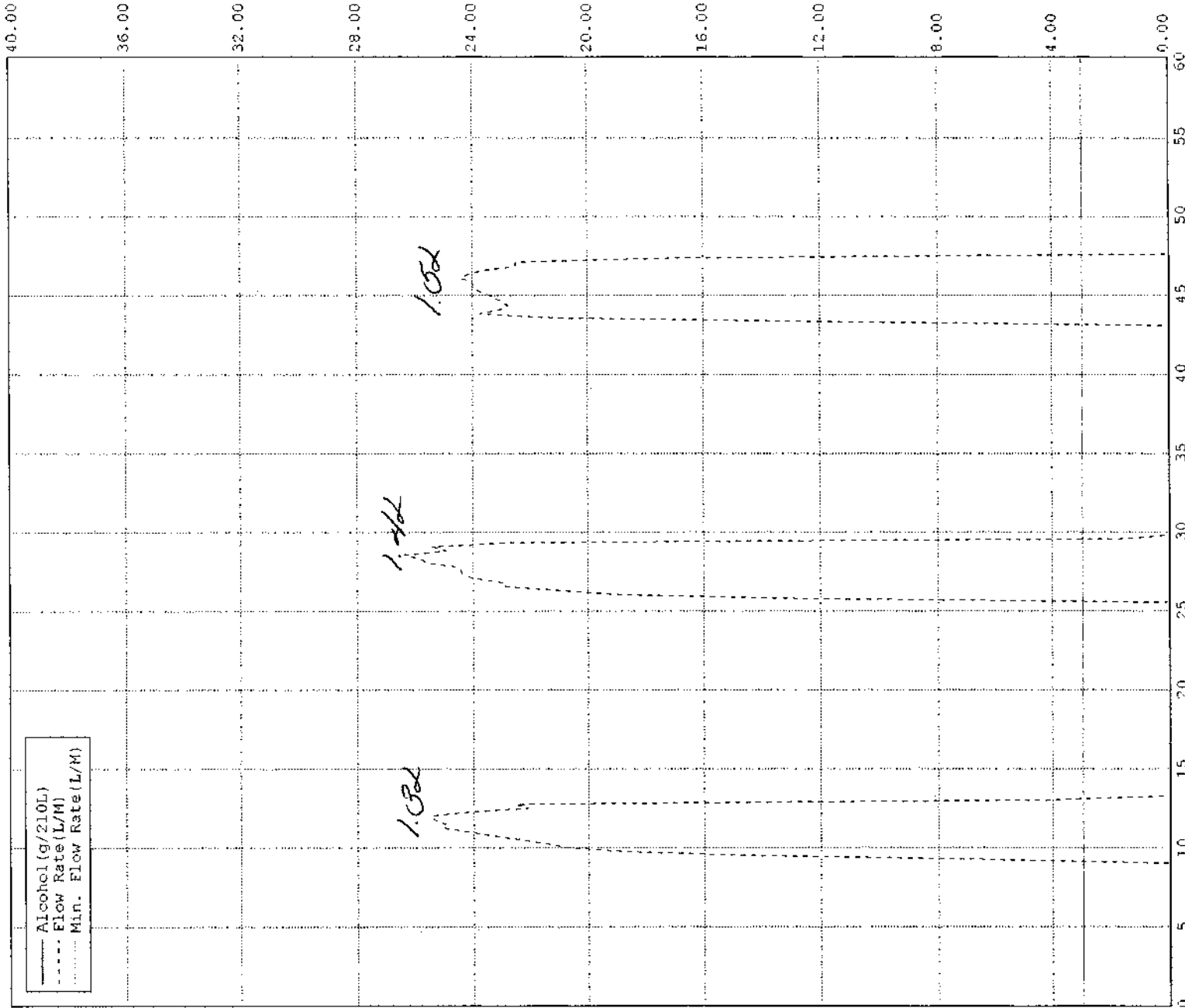
SUBJECT NAME:
 TEST TEST
 LICENSE #: VOLUME TEST

OPERATOR NAME:
 COLLEEN S O'BRYAN
 OPERATOR'S #: 623

DEPT/AGENCY:
 AAAA
 CASE/REPORT: 15-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.52: 0.079
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	13:24
BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:25
EXTERNAL STANDARD	0.079	13:25
BLANK TEST	0.000	13:26
SUBJECT SAMPLE (Vol=1.58L)	0.000	13:27
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.080	13:28
BLANK TEST	0.000	13:29



LINEARITY CHECK

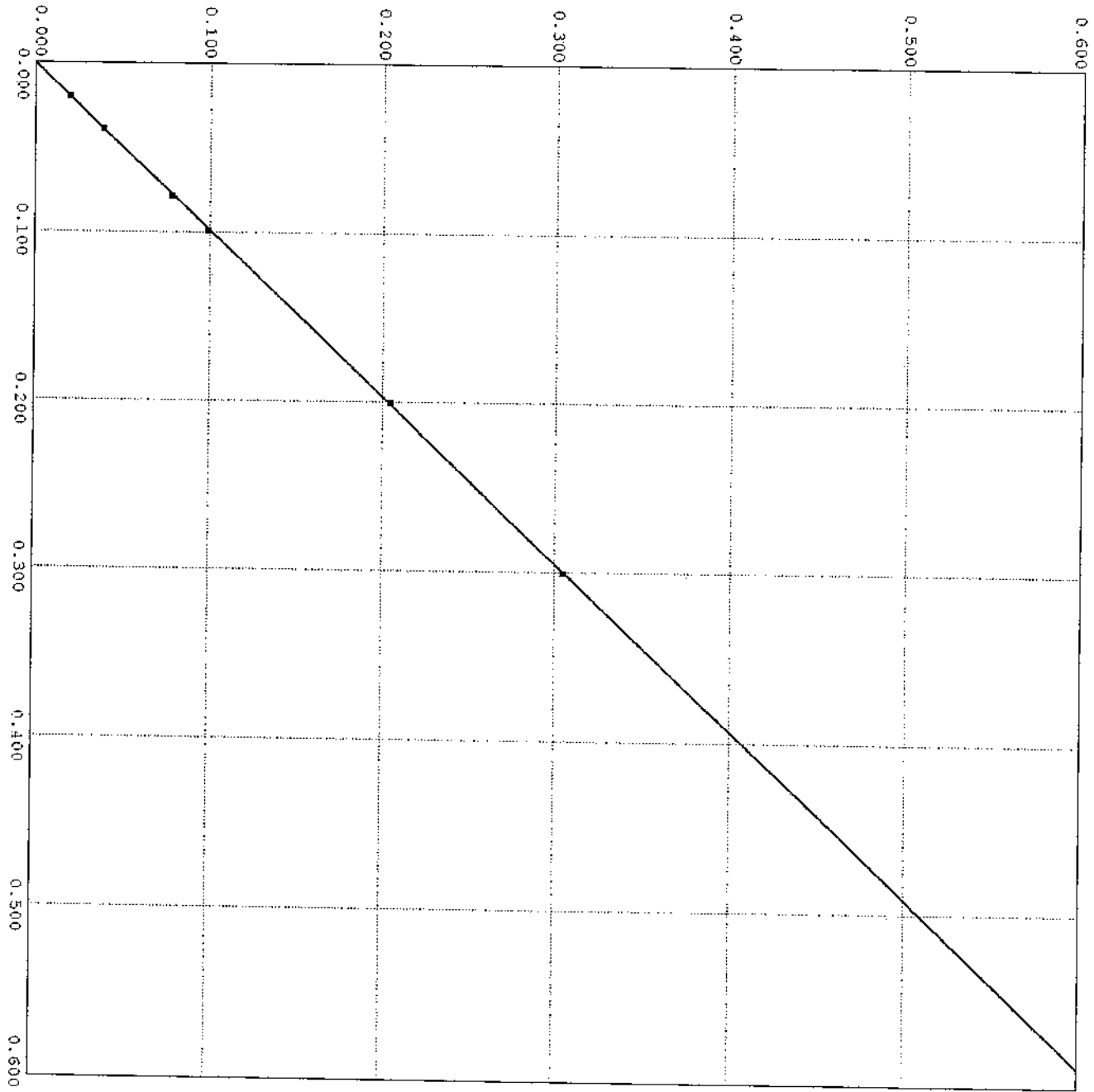
Alaska Department of Public Safety
DATAMASTER dnt: 100694

Date: 12/29/2015
Time: 13:41:52

SUPERVISOR NAME:
COLLEEN S O'BRYEN
OPERATOR'S #: 6237

TARGET	AVERAGE	STD. DEV.
0.020	0.0208	0.0004
0.039	0.0402	0.0004
0.079	0.0794	0.0005
0.099	0.1000	0.0000
0.200	0.2056	0.0009
0.300	0.3056	0.0005

SLOPE = 1.020894
R² = 0.999910



CRB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

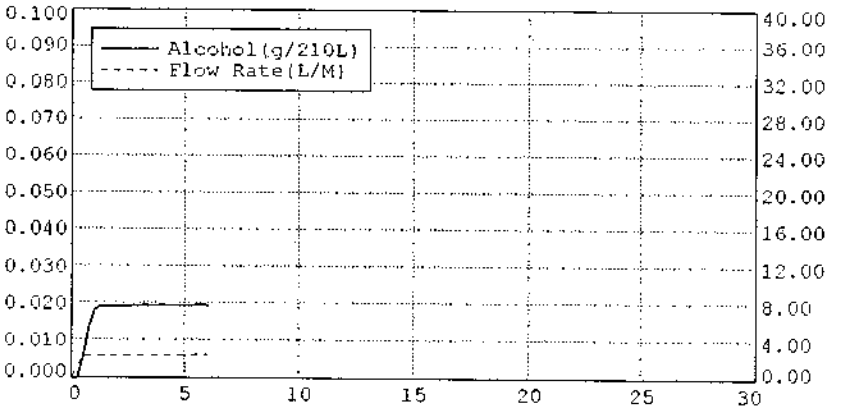
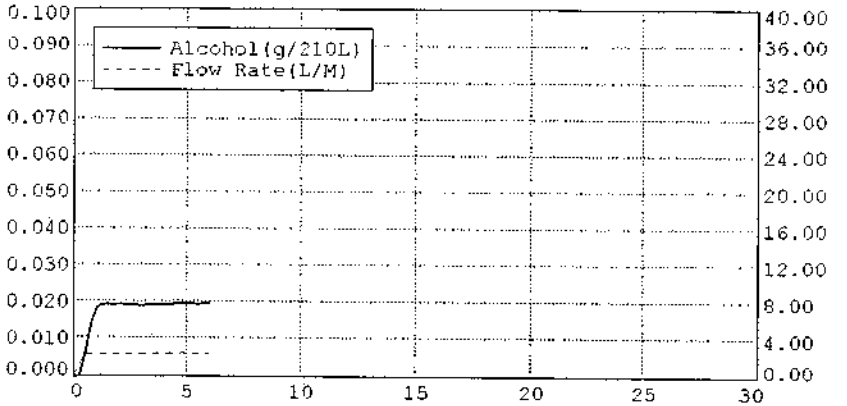
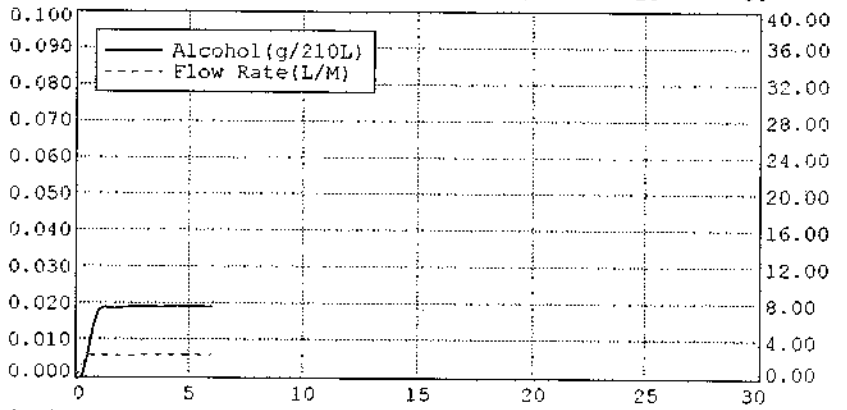
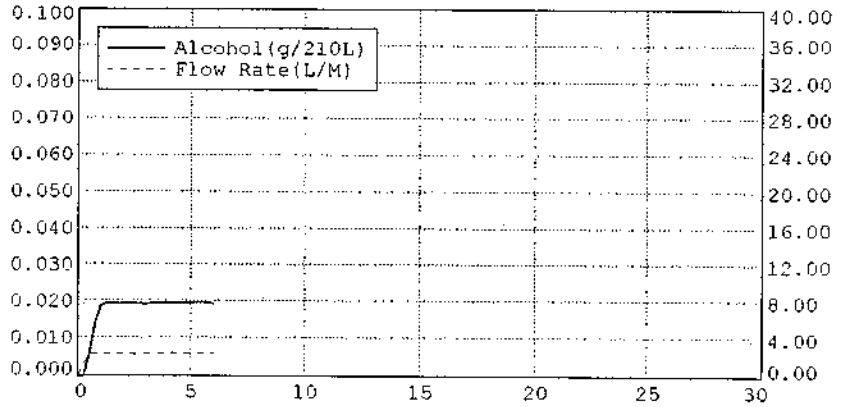
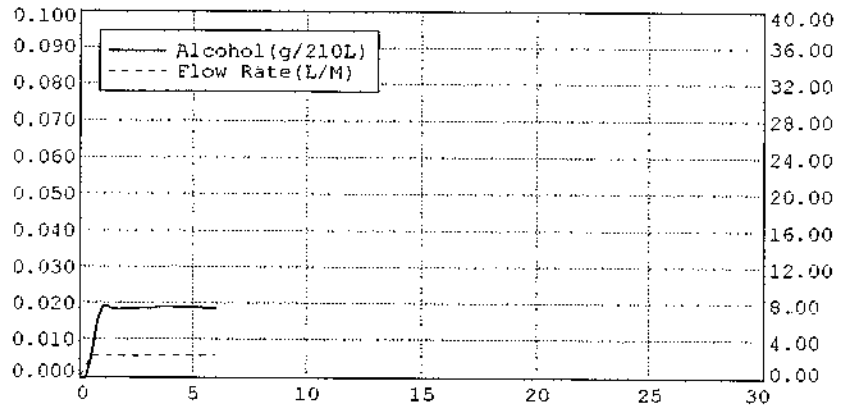
Date: 12/29/2015
 Time: 13:41:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.52: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 606 psi

BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:43
EXTERNAL STANDARD	0.020	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.021	13:45
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.021	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.021	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.021	13:48
BLANK TEST	0.000	13:49

Average = 0.0208
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

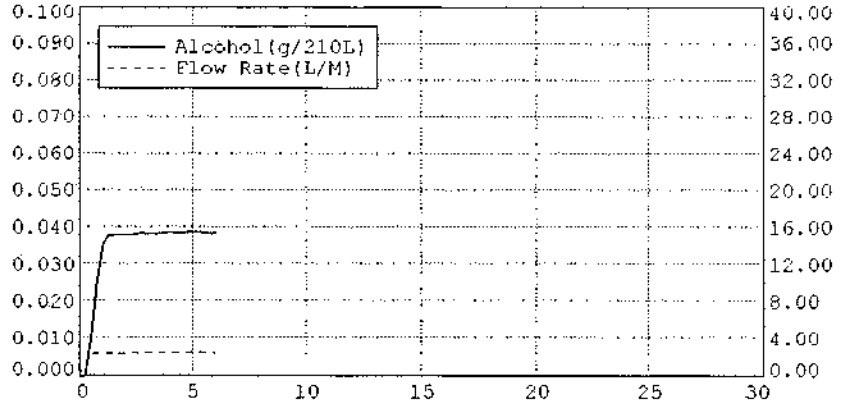
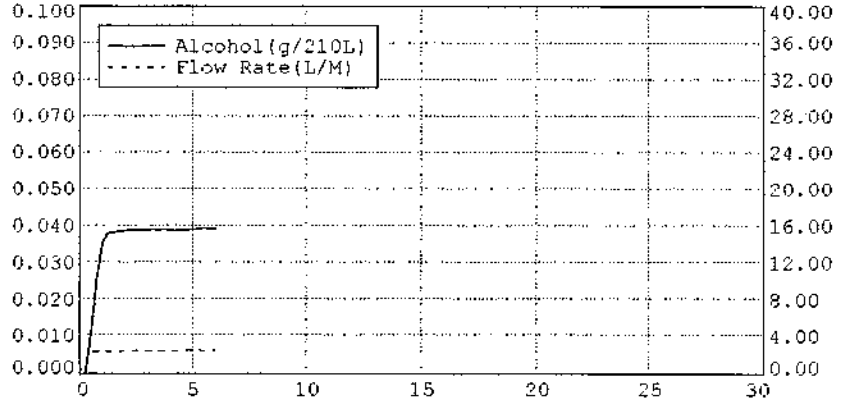
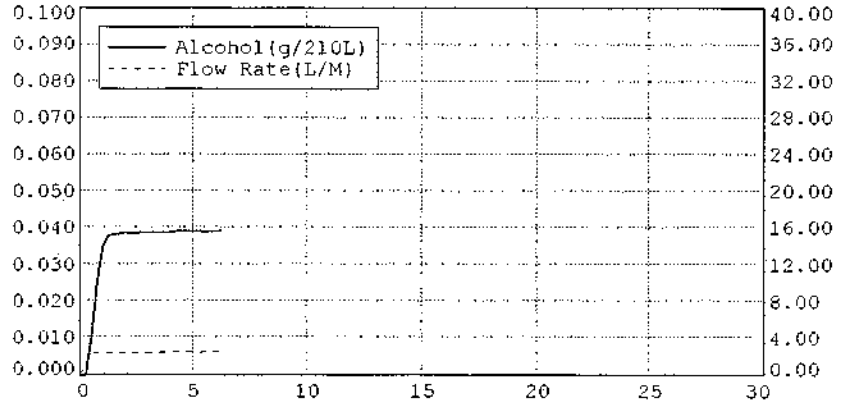
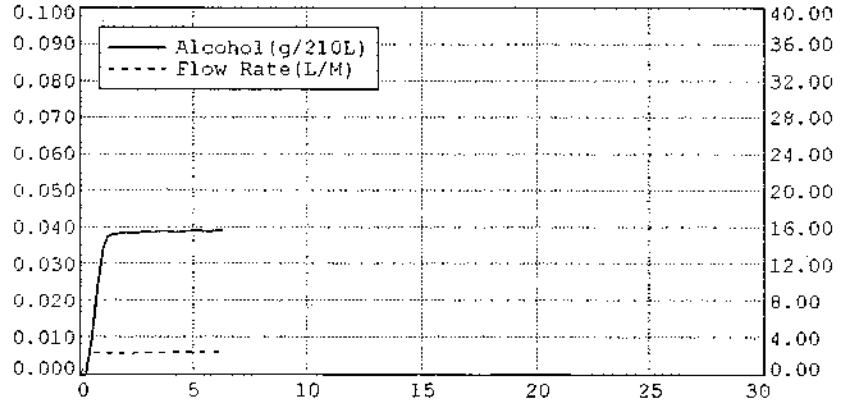
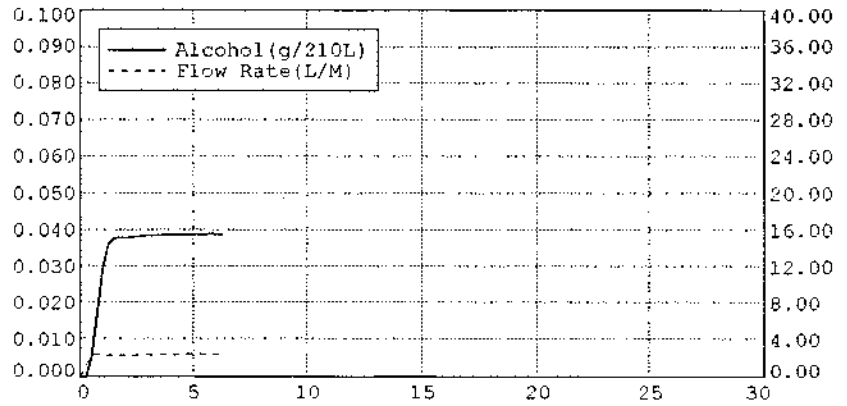
Date: 12/29/2015
 Time: 13:50:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.52: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 636 psi

BLANK TEST	0.000	13:52
INTERNAL STANDARD	VERIFIED	13:52
EXTERNAL STANDARD	0.040	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.040	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.040	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.041	13:56
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.040	13:57
BLANK TEST	0.000	13:58

Average = 0.0402
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

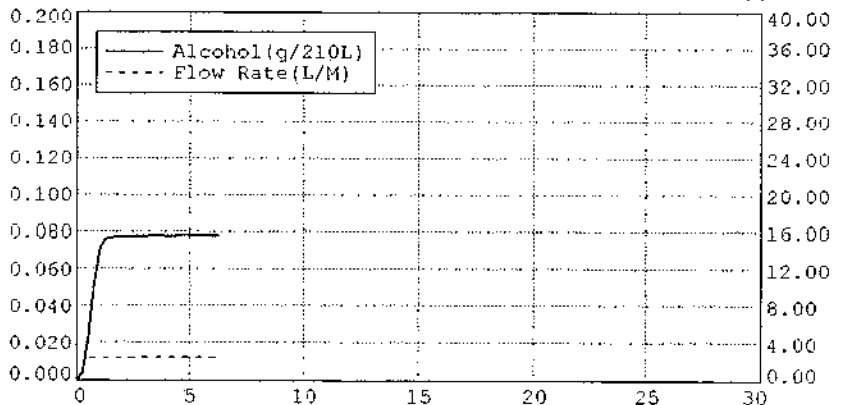
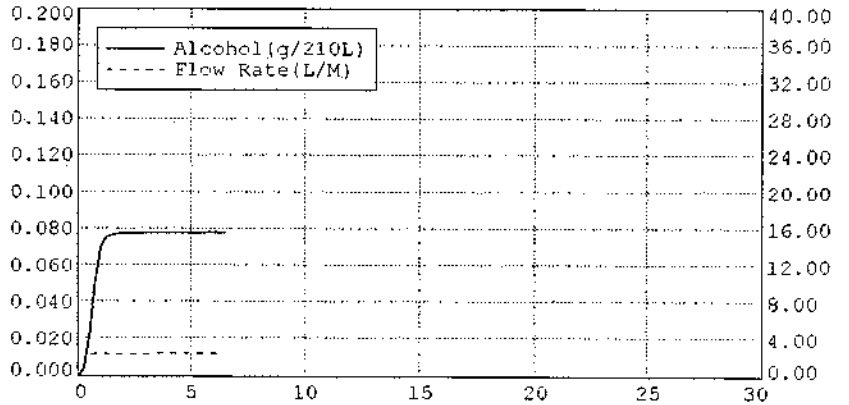
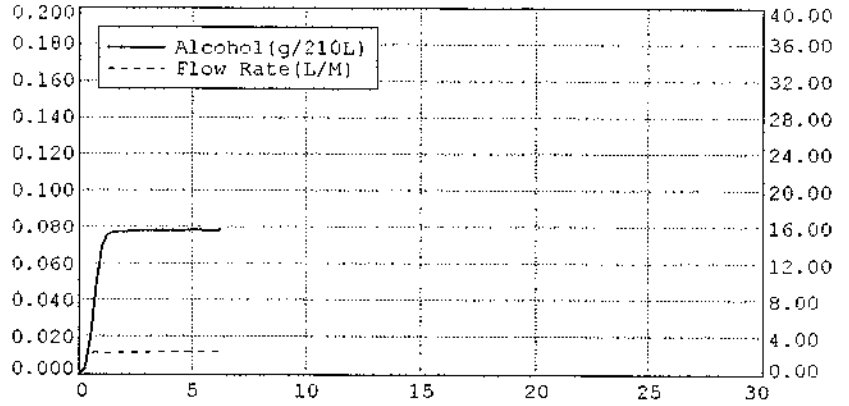
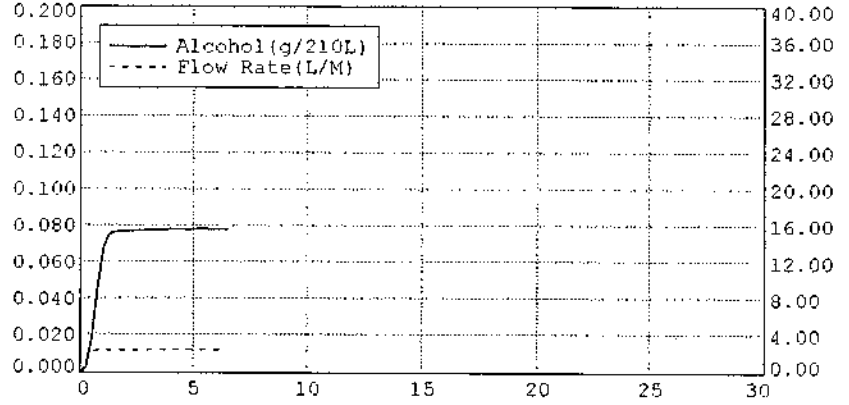
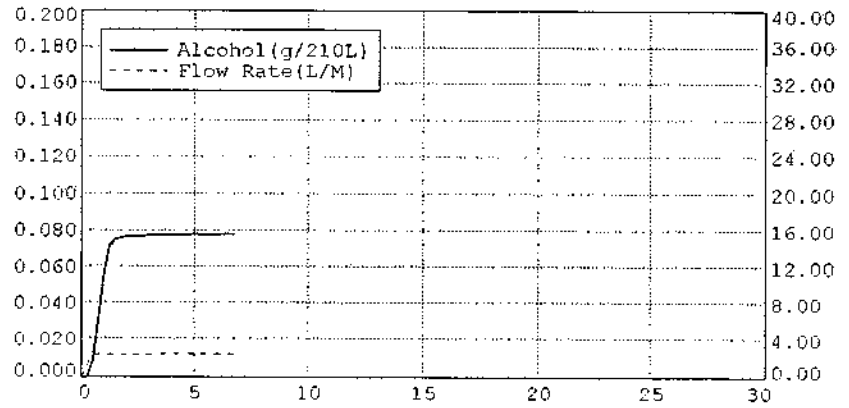
Alaska Department of Public Safety
 DATAMASTER dmt: 100694

Date: 12/29/2015
 Time: 14:07:11

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.53: 0.079
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 719 psi

BLANK TEST	0.000	14:08
INTERNAL STANDARD	VERIFIED	14:08
EXTERNAL STANDARD	0.079	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.079	14:10
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.080	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.079	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.080	14:13
BLANK TEST	0.000	14:14

Average = 0.0794
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

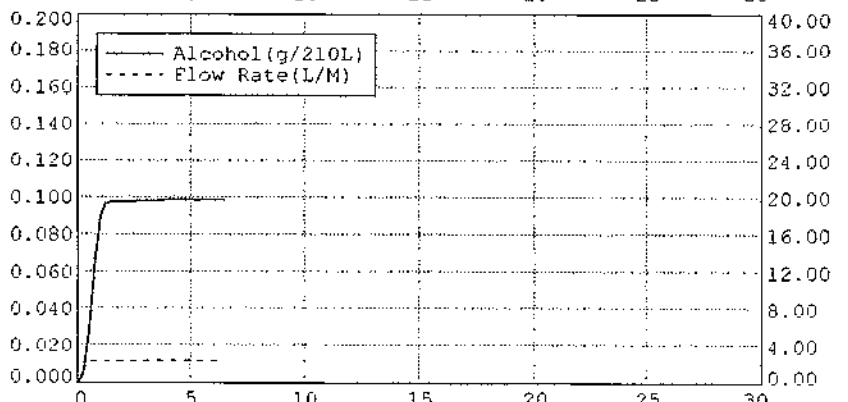
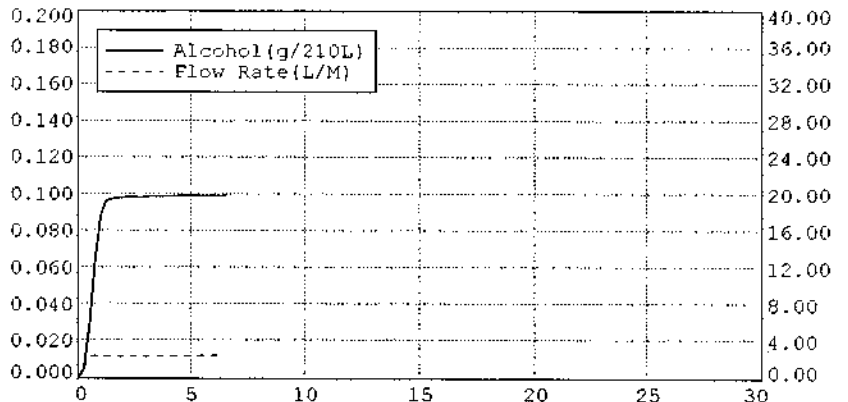
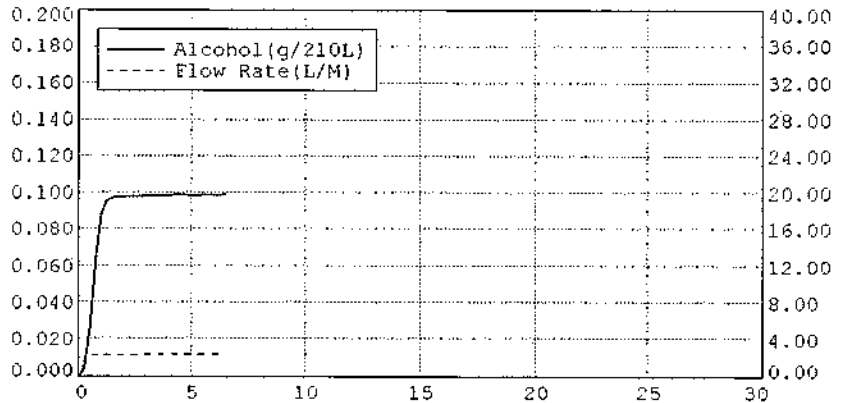
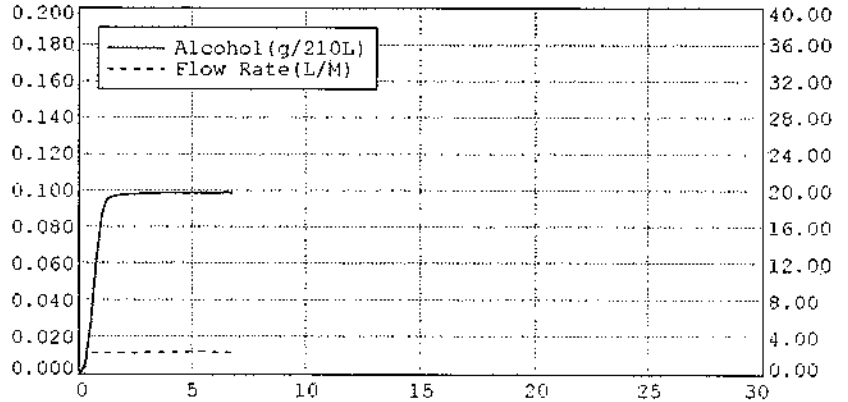
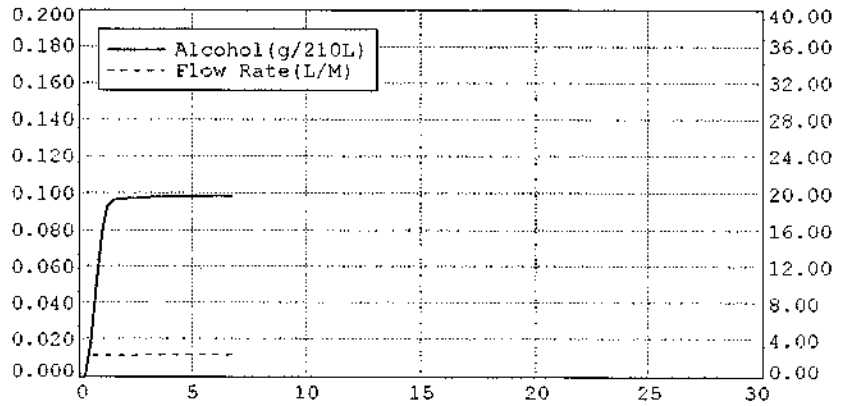
Date: 12/29/2015
 Time: 14:15:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.54: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 610 psi

BLANK TEST	0.000	14:16
INTERNAL STANDARD	VERIFIED	14:16
EXTERNAL STANDARD	0.100	14:17
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.100	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.100	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.100	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.100	14:21
BLANK TEST	0.000	14:22

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

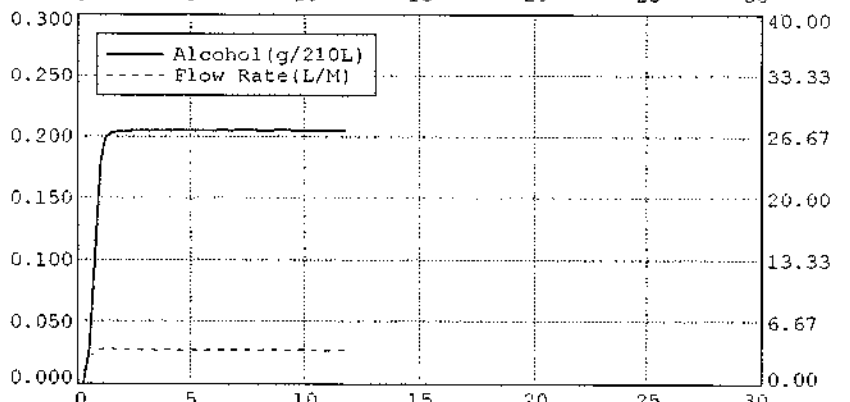
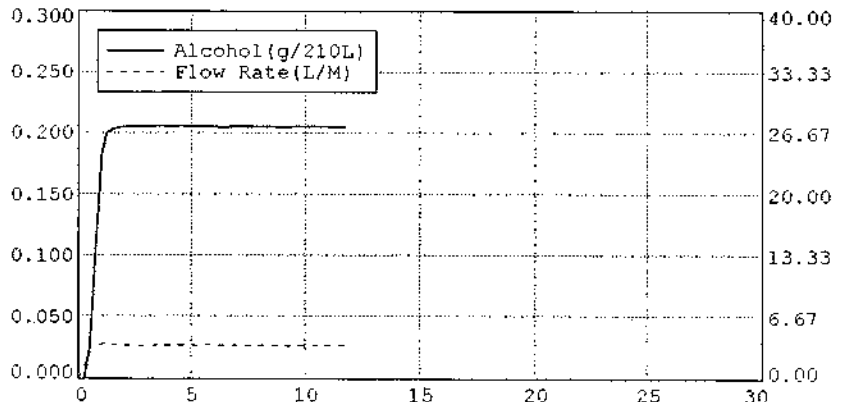
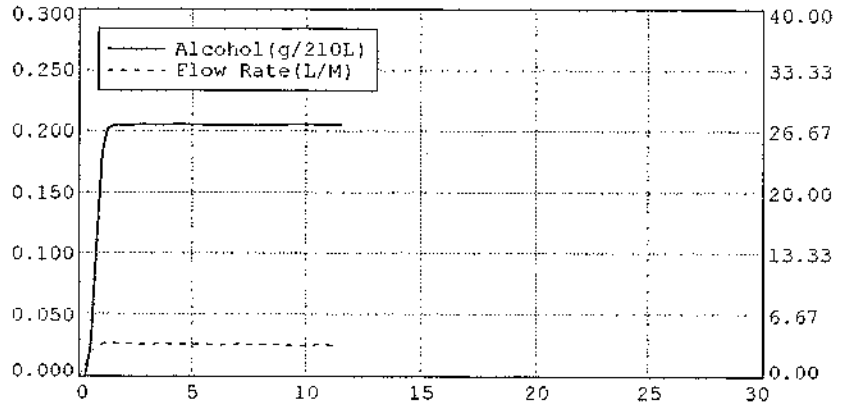
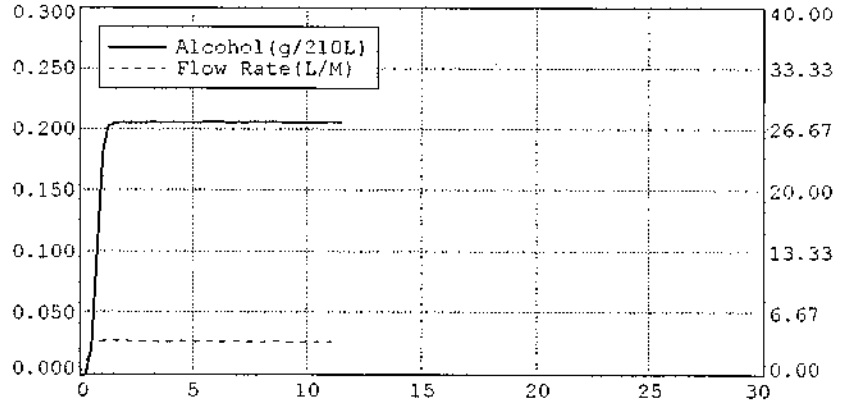
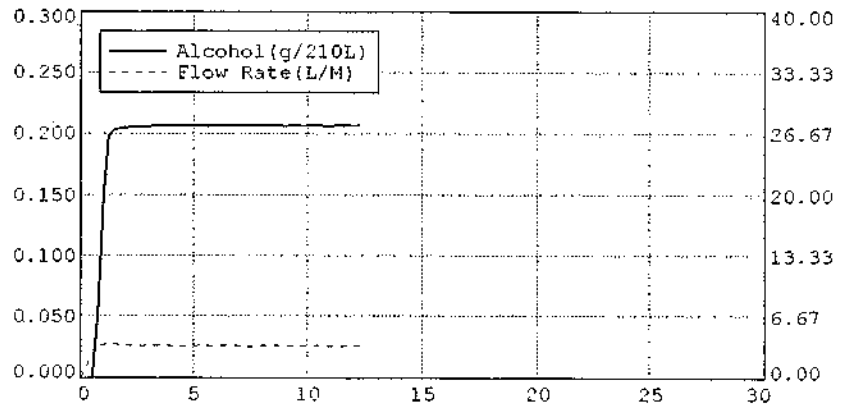
Date: 12/29/2015
 Time: 14:24:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	14:25
INTERNAL STANDARD	VERIFIED	14:25
EXTERNAL STANDARD	0.207	14:25
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.206	14:27
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.205	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.205	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.205	14:30
BLANK TEST	0.000	14:31

Average = 0.2056
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100694

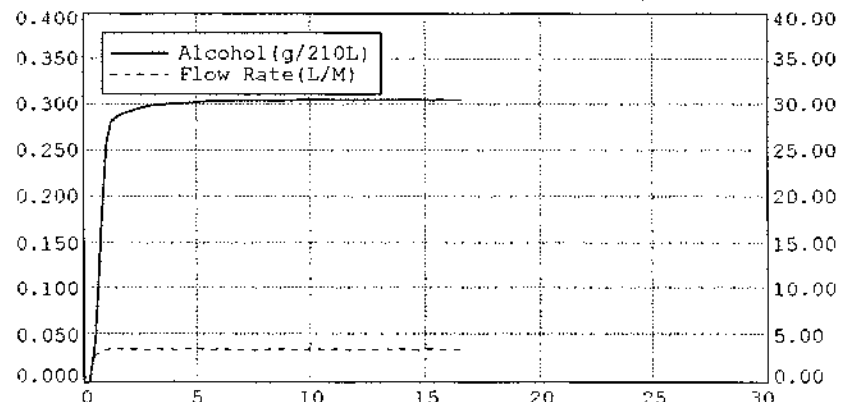
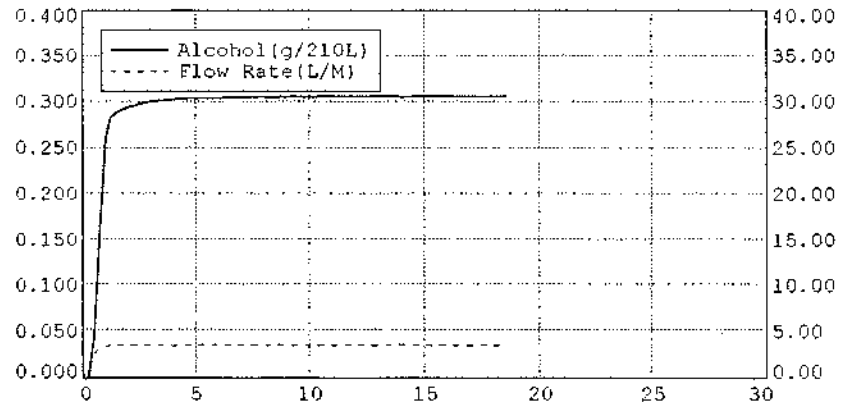
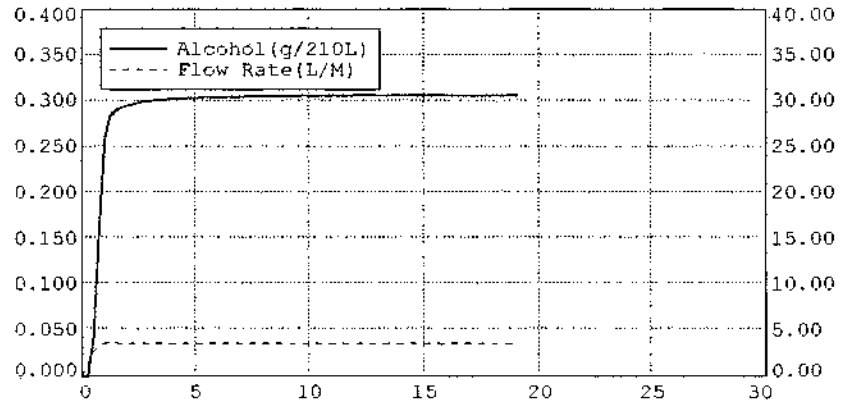
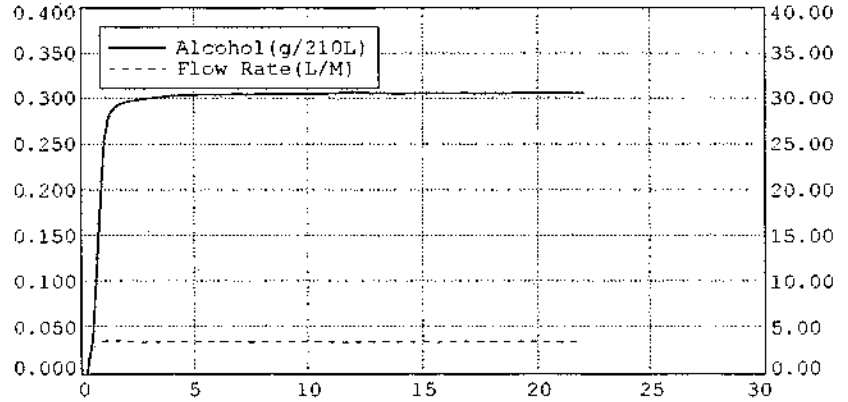
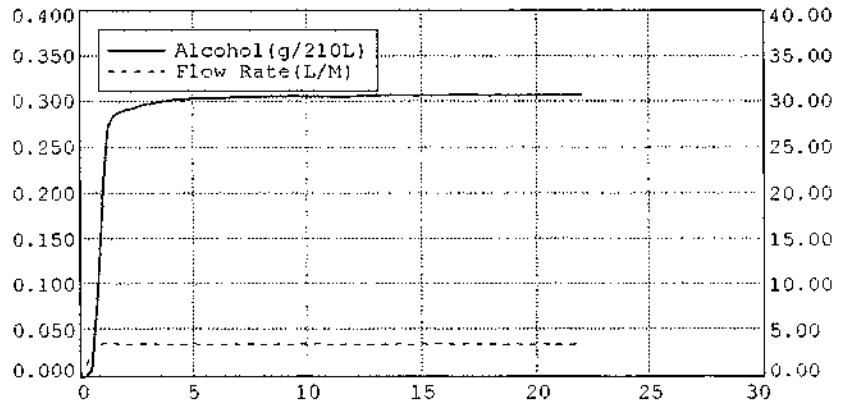
Date: 12/29/2015
Time: 14:33:28

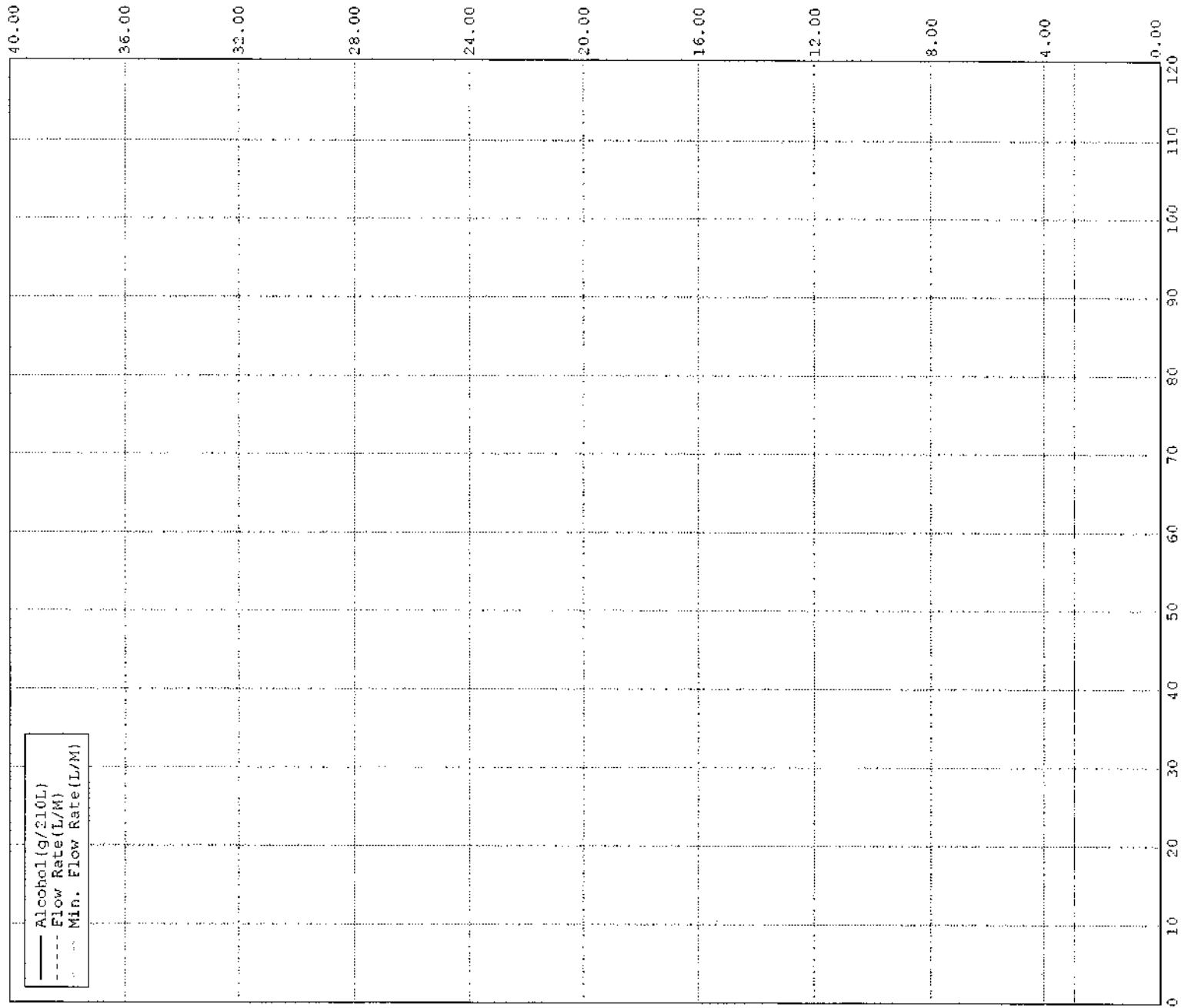
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
LOT #: 15170
EXPIRATION: 07/20/2017

BLANK TEST	0.000	14:34
INTERNAL STANDARD	VERIFIED	14:34
EXTERNAL STANDARD	0.306	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.306	14:36
BLANK TEST	0.000	14:37
EXTERNAL STANDARD	0.305	14:37
BLANK TEST	0.000	14:38
EXTERNAL STANDARD	0.306	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.305	14:40
BLANK TEST	0.000	14:41

Average = 0.3056
Std Dev = 0.0005





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100694

 Date: 12/30/2015
 Time: 09:54:17

SUBJECT NAME:
 TEST TEST
 LICENSE #: INCOMPLETE

OPERATOR NAME:
 COLLEEN S OBRyant
 OPERATOR'S #: 6237

DEPT/AGENCY:
 AAA1
 CASE/REPORT: 15-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.26: 0.078
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:55
 BLANK TEST 0.000 09:55
 INTERNAL STANDARD VERIFIED 09:56
 EXTERNAL STANDARD 0.078 09:56
 BLANK TEST 0.000 09:57
 SUBJECT SAMPLE INCOMPLETE 09:59

CS

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/30/2015
Time: 10:05:55

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

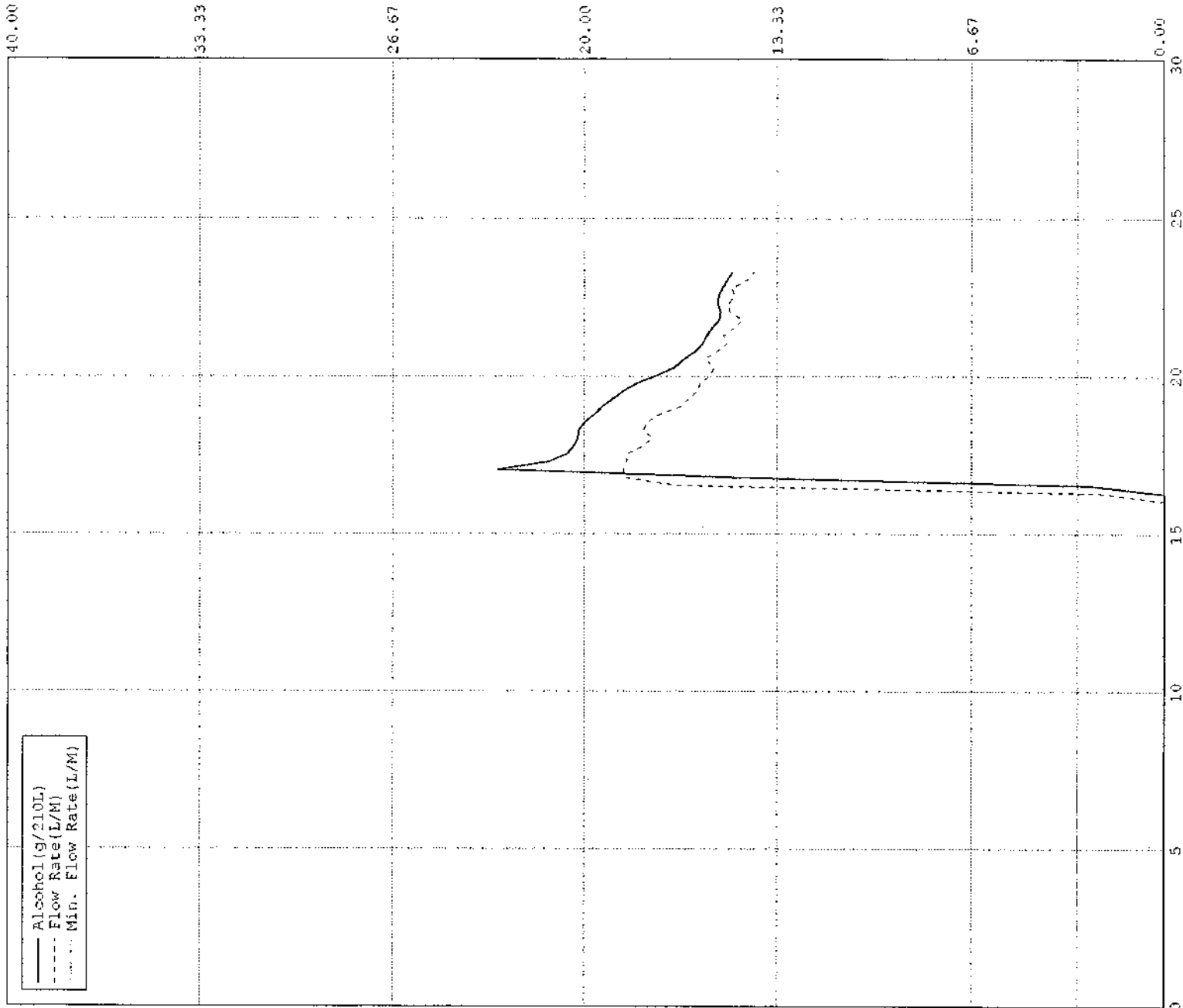
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:11
BLANK TEST 0.000 10:11
INTERNAL STANDARD VERIFIED 10:12
EXTERNAL STANDARD 0.079 10:12
BLANK TEST 0.000 10:13
SUBJECT SAMPLE INVALID 10:13

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/30/2015
Time: 10:20:41

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

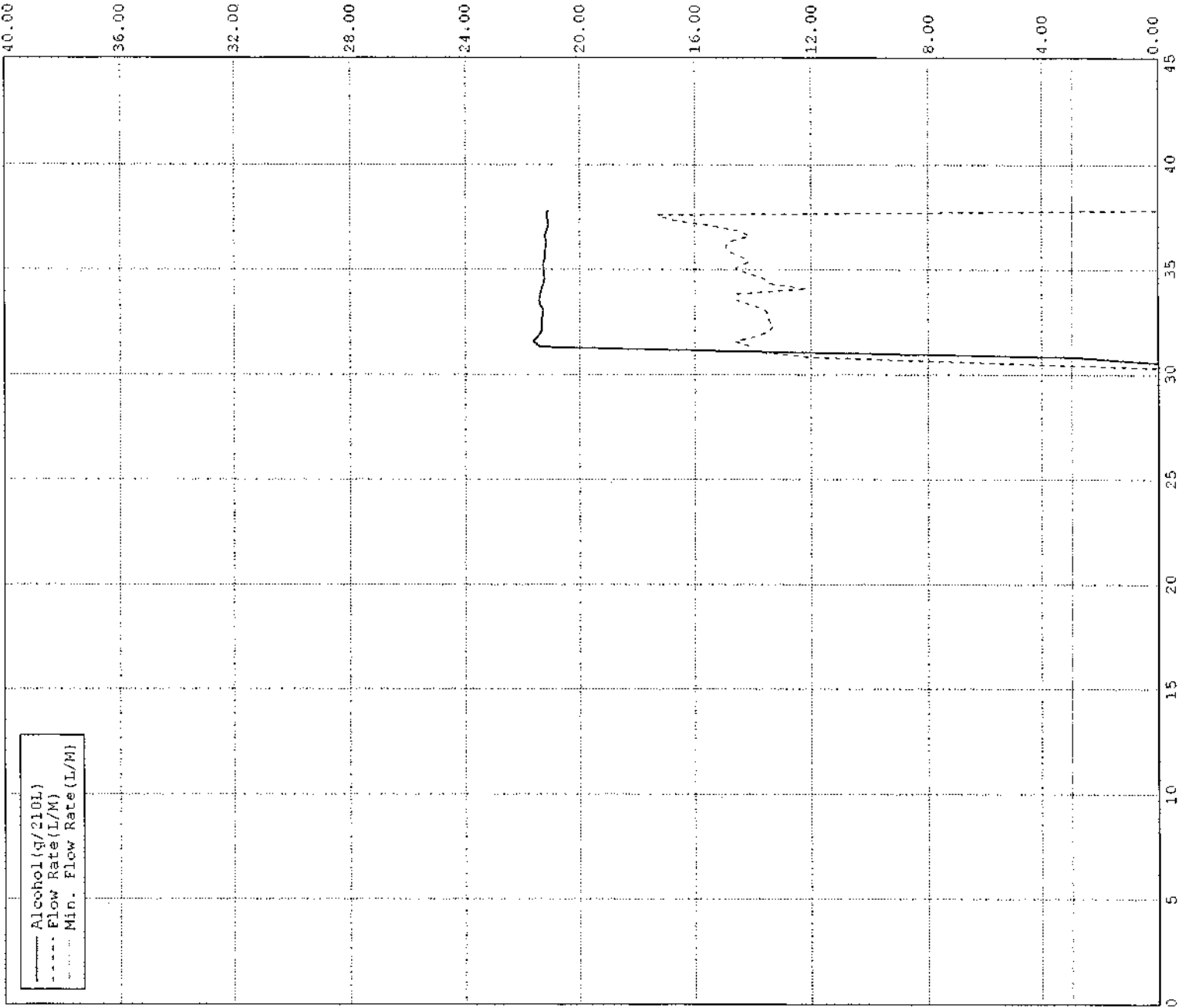
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-124
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:22
BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
Xq = 0.096 (0.09%)		
EXTERNAL STANDARD	0.079	10:22
X[1] = 0.0788 (-0.0002) (0.0037)		
BLANK TEST	0.000	10:23
SUBJECT SAMPLE	XXX	10:24
X[1] = 0.1055 (-0.0179) (0.0005)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/30/2015
Time: 10:27:21

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

OPERATOR NAME:
COLLEEN S OBRZYANT
OPERATOR'S #: 6237

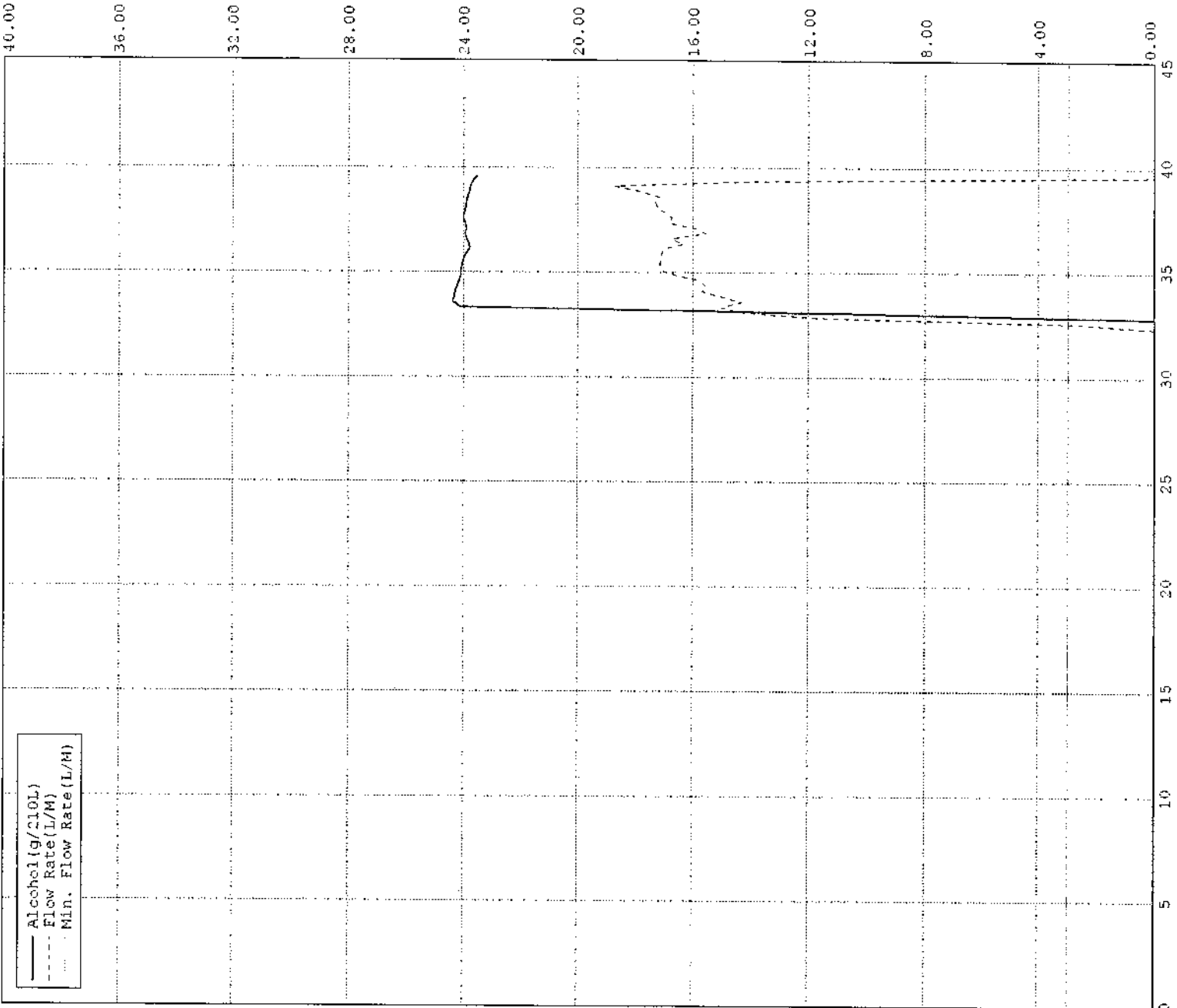
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-124
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:28
BLANK TEST	0.000	10:28
INTERNAL STANDARD	VERIFIED	10:28
$X_q = 0.097$ (0.27%)		
EXTERNAL STANDARD	0.079	10:28
$X[1] = 0.0790$ (-0.0003)	(0.0032)	
BLANK TEST	0.000	10:29
SUBJECT SAMPLE	XXX	10:30
$X[1] = 0.1179$ (-0.0238)	(0.0030)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/30/2015
Time: 10:33:05

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

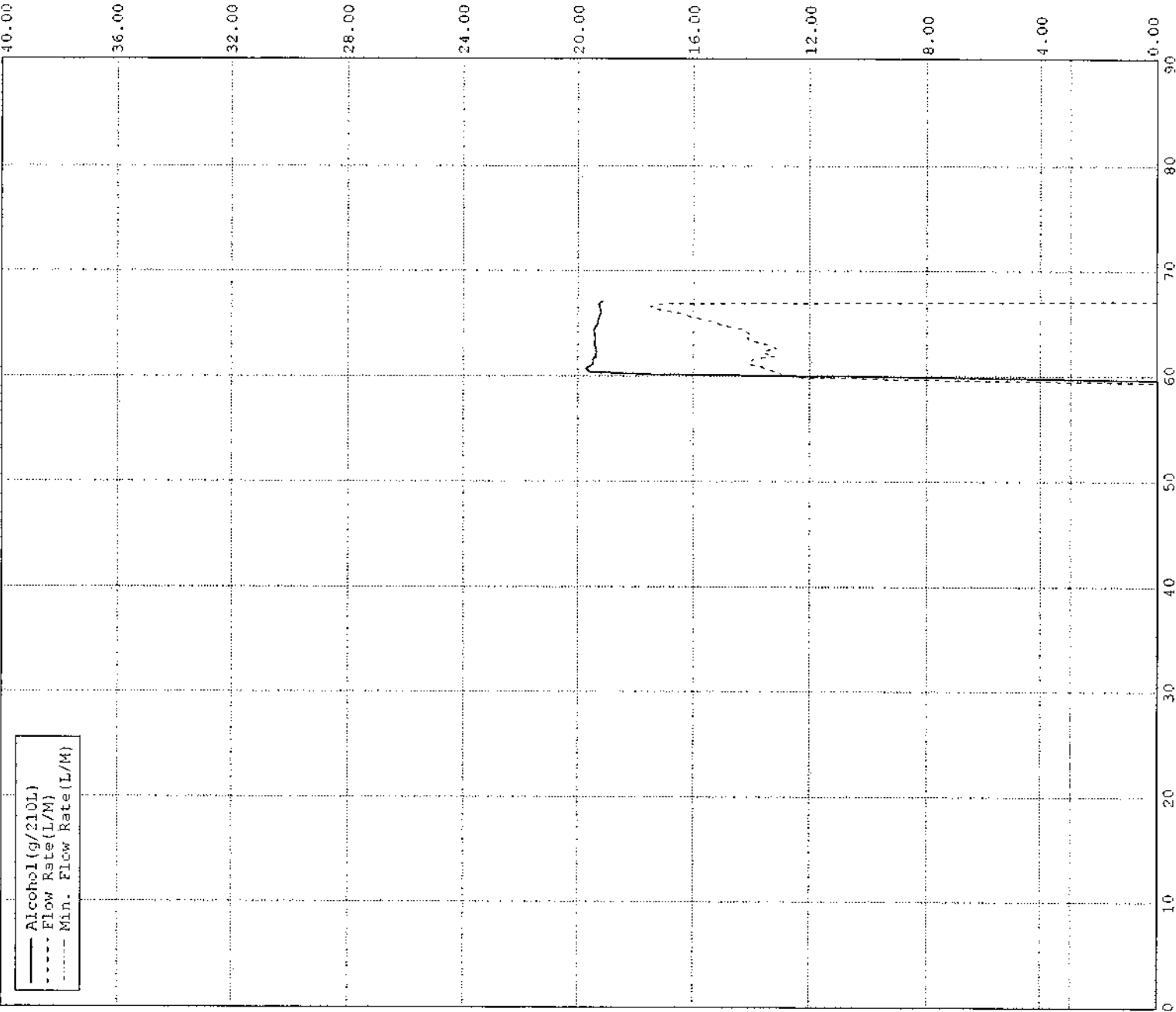
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-124
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:34
BLANK TEST	0.000	10:34
INTERNAL STANDARD	VERIFIED	10:34
Xq = 0.096 (0.00%)		
EXTERNAL STANDARD	0.079	10:34
X[1] = 0.0791 (0.0006) (0.0036)		
BLANK TEST	0.000	10:35
SUBJECT SAMPLE (Vol=1.79L)	0.096	10:36
X[1] = 0.0962 (-0.0004) (0.0014)		
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.078	10:37
X[1] = 0.0784 (0.0001) (0.0031)		
BLANK TEST	0.000	10:38

Filter 2 avg = 0.0001

Filter 3 avg = 0.0084



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/30/2015
Time: 10:48:49

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

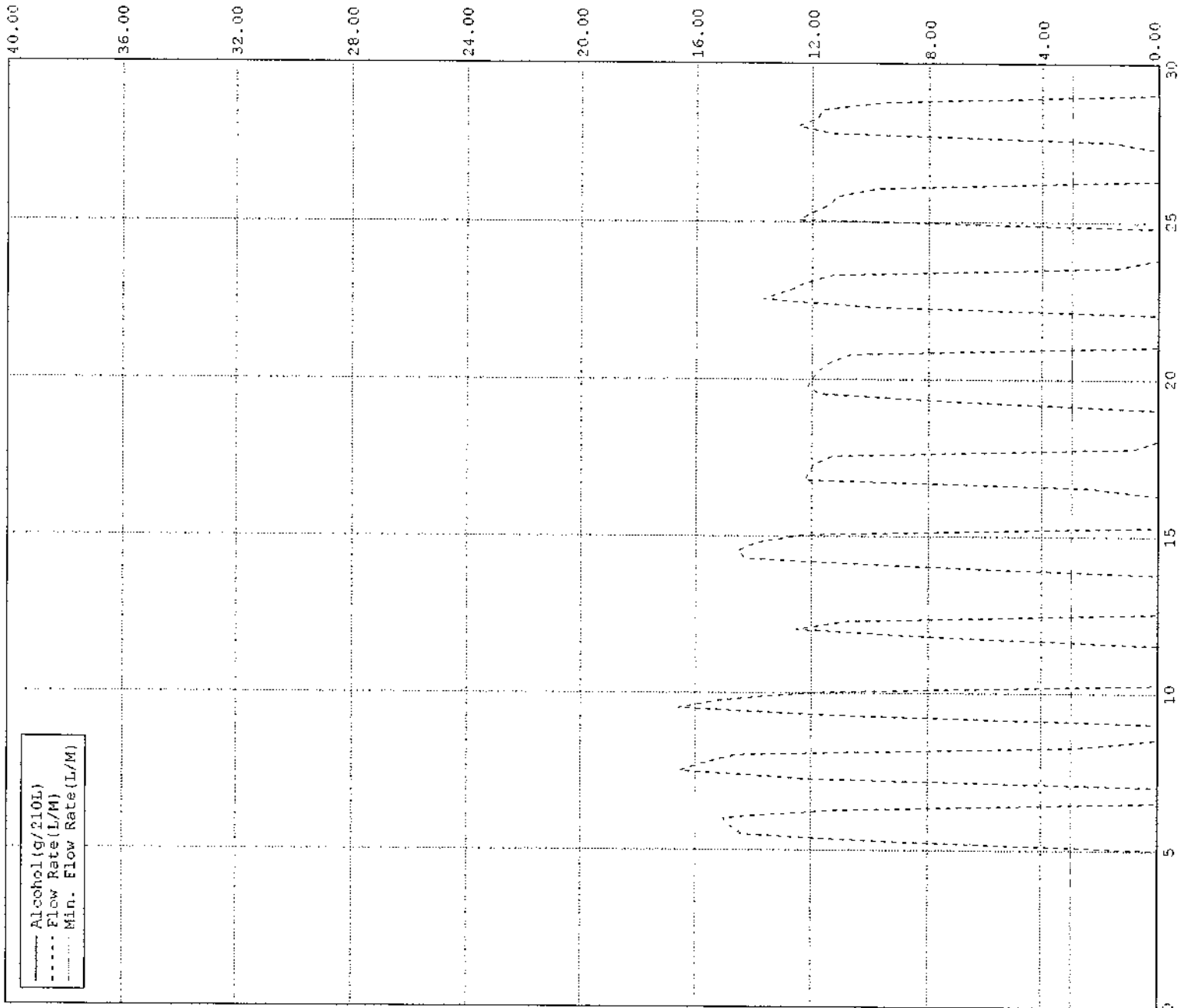
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:51
BLANK TEST 0.000 10:51
INTERNAL STANDARD VERIFIED 10:51
EXTERNAL STANDARD 0.079 10:51
BLANK TEST 0.000 10:52
SUBJECT SAMPLE XXX 10:53

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/30/2015
Time: 10:57:31

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

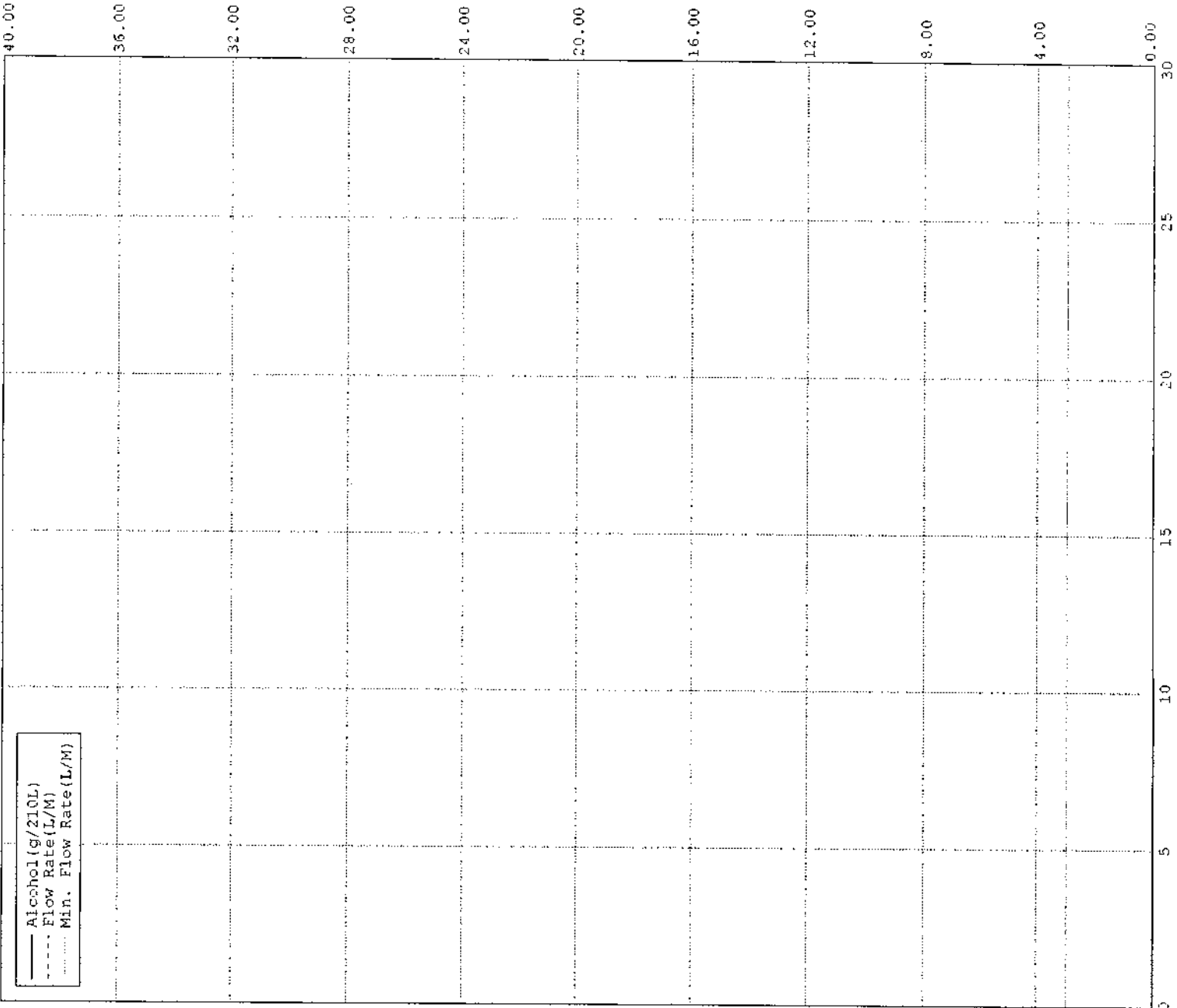
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.31: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 11:00
BLANK TEST 0.000 11:00
INTERNAL STANDARD VERIFIED 11:01
EXTERNAL STANDARD 0.079 11:01
BLANK TEST 0.000 11:02

RFI DETECTED

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 12/30/2015
Time: 11:13:58

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.31: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	11:14
INTERNAL STANDARD	VERIFIED	11:15
EXTERNAL STANDARD	0.079	11:15
BLANK TEST	0.000	11:16
SUBJECT SAMPLE (Vol=1.77L)	0.000	11:16
BLANK TEST	0.000	11:17
EXTERNAL STANDARD	0.080	11:17
BLANK TEST	0.000	11:18

CS

